THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte DENNIS M. PRYOR, MICHAEL CHALLIS, and IAN P. ATKINS

_____

Appeal No. 1997-2216
Application No. 08/392,661

_____

ON BRIEF

_____

Before THOMAS, FLEMING, and GROSS, **Administrative Patent Judges**.

GROSS, **Administrative Patent Judge**.

DECISION ON APPEAL and ORDER

This is a decision on appeal from the examiner's final rejection of claims 1 through 13, which are all of the claims pending in this application. We vacate the rejections under 35 U.S.C. §§ 102 and 103.

We also enter a new ground of rejection with regard to claims 1 through 6, 8, and 12 pursuant to 37 CFR § 1.196(b).

Appellants' invention relates to an overcurrent protection arrangement including a switching circuit and a pulse generator which generates pulses up to a predetermined maximum number or for a predetermined time to reset the switching circuit when the overcurrent ceases. Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. An overcurrent protection arrangement which comprises a switching circuit which is

(a) intended to be series connected in a line of a circuit to be protected,

(b) has a conducting state in which it will allow normal circuit currents to pass, and

(c) has an open state which it adopts when subjected to an overcurrent, the arrangement including a pulse generator which takes power from a voltage difference across the switching circuit and which, when the switching circuit is in the open state, will generate one or more pulses, up to a predetermined finite maximum number of pulses, or for a predetermined time, which will reset the switching circuit to the conducting state if the switching circuit is no longer subjected to an overcurrent.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Zocholl et al. (Zocholl)	3,801,872	Apr. 02, 1974
Sears	4,202,023	May 06, 1980

Wakai et al. (Wakai) 4,477,747 Oct. 16, 1984

Claims 1 through 6 and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sears.

Claims 7, 11, and 13 stand rejected under 35 U.S.C. § 103 as being unpatentable over Sears.

Claims 9 and 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Sears in view of Wakai.

Claim 12 stands rejected under 35 U.S.C. § 103 as being unpatentable over Sears in view of Zocholl.

Reference is made to the Examiner's Answer (Paper No. 19, mailed April 15, 1996), the First Supplemental Examiner's Answer (Paper No. 21, mailed July 22, 1996), and the Second Supplemental Examiner's Answer (Paper No. 25, mailed August 3, 1999) for the examiner's complete reasoning in support of the rejections, and to appellants' Brief (Paper No. 18, filed October 16, 1995), Reply Brief (Paper No. 20, filed May 20, 1996), and Supplemental Reply Brief (Paper No. 22, filed August 9, 1996) for appellants' arguments thereagainst.

I. ORDER

A. Order vacating rejections based on 35 U.S.C. §§ 102 and 103

Upon consideration of the Examiner's rejection of claims 1 through 6 and 8 under 35 U.S.C. § 102, over Sears, of claims 7 and 9 through 13 under 35 U.S.C. § 103, over Sears for claims 7, 11, and 13, over Sears and Wakai for claims 9 and 10, and over Sears and Zocholl for claim 12 it is

ORDERED that the rejections are *vacated*.

B. Discussion

The examiner (Answer, page 4) reads "one or more pulses, up to a predetermined finite maximum number of pulses, or for a predetermined time," as recited in claim 1, as encompassing "one pulse for a predetermined time," according to the alternative language in the claim. The examiner then states (Answer, page 4) that "the pulse [of Sears] has with it an associated predetermined pulsing time provided by the RC circuit 21 and 22 and the conduction of transistor 20." Also, the examiner asserts (Supplemental Answer, page 2) that "pulsing transistor 20 dictates the length of the pulse," and concludes that "[t]his pulse length will be for a predetermined length of time." However, the examiner seems to be confusing "a predetermined time" with "a predetermined period," though the claim language is clearly "time," not

"period." As "a pulse" is defined as being for a predetermined time, the examiner's interpretation renders the claimed phrase redundant and meaningless. "Since words in claims are to be interpreted to have meaning," Freeman v. Minnesota Mining & Mfg. Co., 693 F. Supp. 134, 9 USPQ2d 1111, 1118 (D. Del. 1988), the examiner's interpretation is improper. To give meaning to "for a predetermined time," we must interpret the phrase as meaning that pulses are generated only for a set amount of time and cease thereafter.

Further, although particular limitations from the specification will not be read into the claims,(see Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 867, 228 USPQ 90, 93 (Fed. Cir. 1985)), it is proper to use the specification to interpret a word or phrase in the claim. See E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433, 7 USPQ2d 1129, 1132 (Fed. Cir. 1988); Loctite, 781 F.2d at 867, 228 USPQ at 93. Reading the phrase "one or more pulses, up to a predetermined finite maximum number of pulses, or for a predetermined time," in light of the specification, we find that a reasonable interpretation of this language would be that the entire period during which pulses are generated is a

set length, and that after such time expires no further pulses are generated. Thus, the examiner has failed to give a reasonable interpretation to the claims. The first step of any analysis under 35 U.S.C. § 102 or 103 requires an understanding of what is claimed. As we have indicated, the examiner's interpretation of the claims is flawed. Accordingly, we vacate the anticipation rejection of claims 1 through 6 and 8 and the obviousness rejections of claims 7 and 9 through 13.

II. NEW GROUND OF REJECTION

Claims 1 through 6, 8, and 12 are rejected under 35 U.S.C.
§ 103 as being unpatentable over Sears in view of Zocholl. Sears discloses (column 3, lines 29-33) an overload protector between a power supply and an electrical device which is represented by a load resistor, i.e., series connected in a line of a circuit to be protected. When subjected to an overcurrent, the overload protector assumes a condition in which very little current is delivered to the load, or rather an open state (see column 4, lines 3-18). The protection circuit includes an automatic

resetting stage which generates pulses to reset the circuit when the overload condition is eliminated (see column 4, lines 25-68). However, Sears states (column 4, lines 66-68) that the pulsing continues "until the overload condition is removed," or, rather, indefinitely. Thus, Sears discloses all limitations of claim 1 except for the generation of "one or more pulses, up to a finite maximum number of pulses, or for a predetermined time."

Zocholl discloses an automatic reclosure system with a counter for tracking and limiting the number of times a circuit breaker trips and is reset. Although Zocholl does not explicitly disclose why the number of reclosures is to be limited, Zocholl states (column 1, lines 17-25) that

> [r]eclosing relays are used whenever it is desired to automatically reclose a circuit breaker one or more times after it has been tripped by its protective relay. The protective relays are employed to protect power lines which may be subjected to temporary faults caused by lightning or tree branches which may fall on the power lines wherein the lightning surge disappears after a brief interval and wherein the tree branches are caused to burn free leaving the line free.

In other words, reclosing relays are only used for resetting a circuit breaker after a temporary fault which occurs for a short period of time. Thus, Zocholl implies that the number

of reclosures is to be limited because reclosures are only useful in situations where an overcurrent has occurred for a brief period. Therefore, it would have been obvious to the skilled artisan to limit the number of pulses using a counter in Sears' overcurrent protection arrangement, since the pulses are only effective for a transient overcurrent, and thus for a brief period of time. Consequently, claims 1 and 12 would have been obvious over Sears in view of Zocholl.

As to claims 2, 3, and 8, Sears illustrates in the figure and describes in column 3, lines 38-51, a pass transistor 13 and driver transistor 15 in a Darlington configuration, series connected in the line of the circuit, which act as a switching transistor, and a latching transistor 17 that determines the base current to the switching transistor and acts as a control transistor. As shown in the figure, the base voltage of transistors 13 and 14, the switching transistor, is determined by a voltage drop across the switching transistor. Further, regarding claim 4, latching transistor 17, the control transistor, is coupled to a voltage divider formed by resistor 18 in series with resistor 19 (column 3, lines 52-54). The pulses from the pulse generator supply the base voltage to a

resetting transistor which in turn turns off the latching transistor (see the figure and column 4, line 51), thereby shorting the base and emitter of the control transistor, as recited in claims 5 and 6.

Accordingly, claims 2 through 6 and 8 would have been obvious over Sears in view of Zocholl.

III. CONCLUSION

In view of the forgoing, it is ordered that the decision of the examiner rejecting claims 1 through 6 and 8 under 35 U.S.C. § 102 and claims 7 and 9 through 13 under 35 U.S.C. § 103 is vacated. Claims 1 through 6, 8, and 12 are rejected under a new ground of rejection pursuant to 37 CFR § 1.196(b).

This DECISION and ORDER contains a new ground of rejection pursuant to 37 CFR § 1.196(b)(amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53131, 53197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that, "[a] new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c)) as to the rejected claims:

> (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter

> reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .
>
> (2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED and VACATED
37 CFR § 1.196(b)

JAMES D. THOMAS Administrative Patent Judge	)
MICHAEL R. FLEMING Administrative Patent Judge	) BOARD OF PATENT APPEALS AND INTERFERENCES
ANITA PELLMAN GROSS Administrative Patent Judge	)

apg/vsh

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